CHAPTER III

DATA PROCESSING - SESA MAINFRAME COMPUTER OPERATIONS AND INTERFACES WITH UI ADP SYSTEM

1. Introduction. This chapter contains the ADP specifications for the Unemployment Insurance (UI) Benefit Accuracy Measurement (BAM) Program. Definitions, coding schemes, and record formats are provided for all required and optional items and tasks. The BAM program involves the collection and analysis of large amounts of data. Of primary importance is the information provided to the BAM unit to assist it in investigating the accuracy of UI payments and disqualifying eligibility determinations, which are sampled on a weekly basis. Other data are collected to create the population or universe from which the BAM paid and denied claims samples are selected, to ensure the statistical validity of the sampling procedures, and to evaluate the representativeness of the BAM samples.

Specifications for three major components are described:

! The construction of the UI transactions file on the State's mainframe ADP system, which will be used to define the populations (sampling frames) from which the samples are selected for UI benefits and the three types of denied claims for unemployment compensation: monetary denials, separation issue denials, and denials based on nonmonetary and nonseparation issues. **This task will be performed by each State's ADP staff.**

! The BAM COBOL programs, which 1) edit the population transactions file; 2) select the records which meet the definition for inclusion in the populations; 3) execute a routine to randomly select samples from the appropriate sampling frames; 4) produce an output file of the sampled cases; and 5) produce a file containing aggregate data on the samples and populations which will be used to verify the validity of the samples and the sampling frames. Two separate COBOL programs have been developed. **The source code for the two COBOL programs was distributed by the Department of Labor. States must compile the source code and install the executable (object) code on their ADP systems.**

! The creation of a file containing data which has been downloaded from the State's mainframe for the sampled transactions. This file, referred to as rec1.dat, consists of items for the UI BAM data collection instrument (DCI), which will be downloaded to the State's UI Sun system. **This task will be performed by each State's ADP staff.**

The BAM program has been designed to be as automated as possible. Each SESA has an ADP system (currently a Sun Ultra SPARC 10) to support BAM operations. SESAs can pass UI data from their databases to the Sun computer. The Department's National Office electronically picks up BAM data from the Sun for storage in the UI database at the National Office. This system is designed to:

! increase the accuracy of data flows by minimizing the number of paper transactions and simplifying data storage and retrieval;

! increase the usefulness of the data by simplifying data retrieval and raising the sophistication with which it can be manipulated and combined with other data; and

! reduce the amount of time BAM staff must spend in data handling.

2. State UI Transactions File

This section discusses the steps to be performed by State ADP staff to produce the UI transactions file, which must be created each week and is the initial task in the population definition and sampling process. **State ADP staff must write the program(s) to create this file**. Data for this file are extracted from the State's UI database and management information system.

The UI transactions file is the input file to COBOL program one, which edits the file, verifies that the records are sorted correctly, and identifies records that meet the criteria for inclusion in the UI benefits and denials sampling frames. Only records that meet the definition for inclusion in one of the four BAM populations -- paid benefits, monetary denials, separation denials, and nonmonetary-nonseparation denials -- should be included in the UI transactions file. Records in the UI transactions file will be sorted according to the criteria specified below, using a sort utility on the SESA mainframe, before the transactions file is read by the COBOL program.

A. Data Definitions for the UI Transactions File

1) State ID Code

Federal Information Processing Standard (FIPS) numeric code (not the two-letter postal alphabetic code).

Field Size: 2 Digits

2) Batch Number

Indicates calendar year and week that file was created (YYYYWW). Each week of the year is assigned a unique number beginning with 01 for the week which includes the first Saturday in January. (A week is 12:00 am Sunday to 11:59 pm Saturday).

Field Size: 6 Digits

3) Social Security Number

Social Security Number of claimant (State use only).

Field Size: 9 Digits

4) Claim Date

Use effective date (MMDDYYYY), if claim type of the record is a new initial, additional, transitional, or reopened claim. Item #16, Claim Type, will be coded 01, 02, 03, or 04.

Use week ending date (MMDDYYYY), if claim type of the record is a week claimed. Item #16, Claim Type, will be coded 12, 13, or 14.

Field Size: 8 Digits

5) Transaction Date

For benefit payments, this is the date (MMDDYYYY) that the payment was made or the date that the offset, withholding or intercept was applied. If amounts are withheld or intercepts applied in one sampling week (for example on a Friday) and the check is not issued until the following sampling week (for example on the following Monday), the payment record will be included in the sampling frame for the week in which the Monday falls.

For denied claims, this is the date (MMDDYYYY) that the monetary, separation, or nonmonetary-nonseparation denial was issued by the State agency -- that is, the date printed on the determination notice. If no notice is issued, it is the date that the denial action was entered into the agency's record system or that a permanent stop payment order was issued.

Field Size: 8 Digits

6) Sample Selection Indicator

1 = This record was selected for the BAM sample (paid claims or monetary, separation, or nonmonetary-nonseparation denied claims).

2 = This record was not selected for the BAM sample.

NOTE: When the SESA builds the transactions file, all records should be coded "2"; if the record is selected for the sample, the COBOL program will change the code to “1" on the output file.

Field Size: 1 Digit

7) Transaction (Sample) Type

1 = UI paid claims
2 = Monetary denials
3 = Separation denials
4 = Nonmonetary-nonseparation denials

Field Size: 1 Digit

8) Gender

1 = Male
2 = Female
8 = Information Not Available or Missing

Field Size: 1 Digit

9) Date of Birth

Claimant's month and year of birth (MMYYYY).

Enter 010001 when information is not available from the State's computer records.

If month only is not available, code month as 06.

Field Size: 6 Digits

10) Race Classification

1 = White
2 = Black or African American
3 = Asian
4 = American Indian or Alaska Native
5 = Native Hawaiian or Other Pacific Islander
8 = Information Not Available or Missing

Note: Ethnicity (Hispanic / non-Hispanic) is not coded in the UI transactions file; it must be entered in the first position of data element b13 in the b_master table or the ethnic data element in b_dca_master in the UI database.

Field Size: 1 Digit

11) Program Type

1 = UI	5 = UCFE	9 = Missing
2 = UI-UCFE	6 = UCFE-UCX	
3 = UI-UCX	7 = UCX	
4 = UI-UCFE-UCX	8 = Other	

Field Size: 1 Digit

12) Unemployment Duration Code

1 = Regular UI

2 = State Supplemental Program
(regular beyond 26 weeks when EB is triggered on)

3 = State Additional Program
(special State extended beyond normal duration unless EB is triggered on)

4 = Extended Benefits

5 = Other Federal extended benefits program (e.g. EUC)

Field Size: 1 Digit

13) Amount Paid to Claimant

Whole dollar amount of check actually provided the claimant.

If none paid (i.e., initial claim, claimed/not paid, totally offset, intercepted, withheld or deducted), entry will be 000.

Field Size: 3 Digits

14) Amount Offset Applied to Prior Overpayment

Whole dollar amount of entitlement applied to an outstanding overpayment.

If none offset, entry will be 000.

Field Size: 3 Digits

15) Amount of Intercept or Withholding

Whole dollar amount of entitlement applied to outstanding child support payments, Federal, State or local income tax withholding, or amount withheld for over-issuance of Food Stamp coupons.

If none intercepted or withheld, entry will be 000.

Field Size: 3 Digits

16) Claim Type

00 = No week claimed
01 = New Claim
02 = Additional Claim
03 = Transitional Claim
04 = Reopened Claim
11 = Waiting Week
12 = First Payment (optional code)
13 = Continued Week (paid or claimed but not paid)
14 = Final Payment (optional code)
15 = Supplemental Payment (paid previously)

Field Size: 2 Digits

17) Filing Status Indicator

1 = Intrastate - a claim filed in the State in which the claimant's wage credits were earned, including combined wage claims, in which claimant wage credits have been transferred from one or more States to the State in which the claim was filed.

2 = Interstate liable - a claim filed through the facilities of another (agent) State against this (liable) State.

3 = Interstate agent - a claim filed in this (agent) State against another (liable) State.

Field Size: 1 Digit

18) Workshare Percentage

Code percent of unemployment in week due to a workshare agreement.

Use 00 if claimant is not in a workshare agreement or SESA does not collect this information.

Field Size: 2 Digits

19) Run Date for Program (optional)

Identifies when program to build file was executed (MMDDYYYY).

Field Size: 8 Digits

20) Adjustment Indicator (optional)

1 = This record adjusts previously reported information.

2 = This record has not been previously reported.
(Default code if item not collected.)

Field Size: 1 Digit

21) Total Amount "Paid" to Claimant

The sum of item 13 (Amount Paid to Claimant), item 14 (Amount Offset), and item 15 (Amount of Intercept or Withholding).

Field Size: 3 Digits

B. Record Format for UI Transactions File

Item #	Name	Field Size	Positions	Formats
1	State I.D.	2	1-2	FIPS Code
2	Batch #	6	3-8	YYYYWW
3	Social Security #	9	9-17	Actual #
4	Claim Date	8	18-25	MMDDYYYY
5	Transaction Date	8	26-33	MMDDYYYY
6	Sample Select. Ind.	1	34	1 or 2
7	Transaction Type	1	35	1 to 4
8	Gender	1	36	1, 2 or 8
9	Date of Birth	6	37-42	MMYYYY or 010001
10	Ethnic	1	43	1 to 5 or 8
11	Program Type	1	44	1 to 9
12	UI Duration	1	45	1 to 5
13	Amount Paid	3	46-48	Whole Dollars
14	Amount Offset	3	49-51	Whole Dollars
15	Amount of Intercept or Withholding	3	52-54	Whole Dollars
16	Claim Type	2	55-56	00-04, 11-15
17	Filing Status	1	57	1 to 3

18	Workshare Pct.	2	58-59	00 to 99
19	Run Date	8	60-67	MMDDYYYY
20	Adjustment Ind.	1	68	1 or 2
21	Total Amount "Paid" To Claimant	3	69-71	Whole Dollars
--	Filler	9	72-80	zero-filled; can be used by State for edit codes.

C. Timing and Frequency

The UI transactions file is created weekly. It may be created by accessing the SESA database each day it is updated or once each week after all updating activity has been completed. The weekly period is defined as 12:00 a.m. Sunday to 11:59 p.m. Saturday. The file must be ready for processing as soon as possible after all transactions for the week have been extracted but no later than the following Monday morning.

If the SESA routinely maintains a cumulative UI transactions file on its ADP system during the defined week, the weekly UI transactions file may be created with a single computer run at the end of the week. If a cumulative file is not maintained, it will be necessary to construct the weekly data file by accessing the SESA database each day it is updated. Each SESA may determine the most efficient file creation procedure in light of its normal operations.

For purposes of illustration, assume that the SESA updates its database five nights per week, Monday through Friday, and that no cumulative file is routinely maintained during this period. In this case, it would be necessary to construct the UI transactions file by accessing the database each night and cumulating the records. The computer program that the State uses to select records for the UI transactions file must be executed on Monday night after the UI transactions database has been updated, and the output must be stored. The same procedure must be repeated on Tuesday, and records selected for Tuesday must be added to the file created on Monday. In this example, the procedure would be applied five times during the week to obtain all of the records for the UI transactions file for that week.

States have the option of including the Run Date in each record in the weekly UI transactions file. If the program the State has written to create the UI transactions file is run only once each week (because the SESA maintains a cumulative file of UI transactions), then one Run Date will be entered for all records selected for the weekly UI transactions file. In contrast, if the program is run on five different days (after the

SESA's database is updated each day), then the Run Date for the records in the weekly UI transactions file will have five different values corresponding to the dates on which the records were selected.

D. Distinguishing Between Payments and Weeks

The weekly UI transactions file for paid claims can be constructed without difficulty as long as there is a separate record for each specific week of unemployment insurance paid or offset in the SESA's files. Problems may arise in constructing the transactions file if the SESA's database of UI transactions has a single payment record (or applies a single offset) that meets the definition of an original payment but is for more than a single week of unemployment.

For example, assume that in a case involving a labor dispute, a ruling is issued that an individual claimant must be paid for eight weeks of unemployment claimed after the labor dispute began. If the SESA has only a single record in its computer files at the time all eight weeks of unemployment are paid, the State must create eight individual records on the weekly UI transactions file.

Alternatively, some SESAs create two or more separate records for a single week's payment when, for example, that week is chargeable to two or more programs (e.g., UI/UCFE, UI/UCX), is chargeable to two or more employers, or is for a payment and an offset. If this occurs, the separate records must be combined. The UI transactions file must have a single payment/offset record for each claimant for each week.

These procedures must be followed because the BAM paid claims sample consists of single weeks for which UI benefits were paid or offsets applied. The BAM sampling methodology requires that each element in the paid claims sampling frame (i.e., each record in the transactions file) represent a single week compensated. Also, the specific amount of the payment/offset that applies to each individual week of unemployment must be identified on the record for each week.

E. Definitions of UI Transactions

In order to make statistically reliable inferences about the claimant population, it is first necessary to define the population about which inferences will be made. SESAs should use the following BAM population definitions to identify records on their UI databases for inclusion in the UI transactions file.

(1) Paid Claims

Not all weeks compensated are included in the BAM sampling frame. The survey population will be selected from all weeks for which payments are made

or offsets applied during a period that begins at 12:00 a.m. on Sunday and ends at 11:59 p.m. on Saturday. This interval is defined by the run time(s) of the computer programs that issue the checks or apply offsets. The compensated weeks must meet a series of criteria to be included in the survey population. If the criteria listed below do not classify all weeks as either included or excluded weeks, clarification about whether particular weeks should be included or excluded must be obtained by contacting the appropriate Regional Office.

a. Included Weeks. From the total statewide weeks for which payments are made during the time interval defined above, include only weeks that fall into all of the following categories (1-4):

1) Regular Program Type Claim. One of:
   a) UI
   b) UCFE
   c) UI-UCFE
   d) UCX
   e) UI-UCX
   f) UCFE-UCX
   g) UI-UCFE-UCX

2) An Original Payment Week. Weeks for which the payments/offsets made are original payments/offsets (except waiting weeks). An original payment/offset is defined as the first valid payment/offset made by the agency to a claimant for that week. The offsets would normally recover overpayments established for previous weeks.

3) A Total or Partial Payment/Offset

   a) Weeks for which "total" payments/offsets are made. Include weeks for which no checks were issued because the entire payment was offset.

   b) Weeks for which true partial payments/offsets are made.

   c) Weeks for which part-total payments/offsets are made.

4) Weeks for which payments/offsets/intercepted payments are made to intrastate claimants, to interstate claimants by the liable State, or for combined wage claims.

b. Excluded Weeks. Weeks that fall into any of the following categories will be excluded from the BAM survey population.

1) Weeks for which supplemental payments are made. These

"non-original" payment weeks are excluded because original payments/offsets (as defined above) already have been made for the week claimed. For example, if a revised wage statement indicated that a claimant should have been paid $95/week but the claimant originally was paid $80 and later received a supplemental payment of $15, that week would not be included in the population at the time the supplemental payment was made.

2) All Waiting Weeks. Exclude whether such weeks are compensated or not.

3) Weeks with Stop Payments. All weeks for which checks are written to individuals for whom a "stop payment order" is in effect for the particular week the check is written.

4) All weeks paid under the Short Time Compensation (STC) (Workshare), Extended Benefits (EB), Trade Readjustment Allowance (TRA), Disaster Unemployment Assistance (DUA) programs, any temporary Federal-State supplemental compensation programs, or other special programs, such as EUC.

(2) Monetary Denials

Unless otherwise stated, definitions refer to those used in ET Handbook 401, 3rd edition. ETA report cell references are those used in ET Handbook 402, 4th edition.

a. Include all initial claims that meet the definition for inclusion in the ETA 5159 Claims and Activities report on lines 101 (State UI), 102 (UCFE, No UI), and 103 (UCX only), for item 2 (new intrastate, excluding transitional), item 6 (transitional), and item 7 (interstate received as liable State) and for which eligibility was denied because of:

- Insufficient wages,
- Insufficient hours/weeks/days,
- Failure of high quarter wage test,
- Requalification wage requirement, or
- Other State monetary eligibility requirement

b. Exclude denied claims made under the STC, EB, TRA, DUA programs, any temporary Federal-State supplemental compensation programs, or other special programs, such as EUC.

Note: In order to allow time for States to request and receive wage credits from out-of-State employers (combined wage claims) or Federal wages (UCFE and/or UCX programs), the construction of the sampling frame for monetary denials will be delayed two weeks. Monetary denial records that satisfy the following criteria will be included in the UI transactions file.

1) Transaction date (positions 26-33 in the UI transactions file) must be greater (later) than or equal to the date 14 days prior to the beginning date of the batch.

2) Transaction date must be less (earlier) than or equal to the date 14 days prior to the ending date of the batch.

3) Claim date (positions 18-25 in the UI transactions file) must be less (earlier) than or equal to the transaction date.

4) Claimant is monetarily ineligible for unemployment compensation (UC) as of the date that the UI transactions file is created (run date, positions 60-67 in the UI transactions file).

Example: For batch 200123 (June 3 - 9, 2001), the sampling frame will consist of new initial and transitional claims for which: 1) a determination denying monetary eligibility was issued between May 20 and May 26; 2) the claim date is on or prior to the date of the determination denying eligibility; and 3) the claimant is monetarily ineligible for UC as of the date that the program that constructs the transactions file is run.

(3) Separation Denials

Unless otherwise stated, definitions refer to those used in ET Handbook 401, 3rd edition. ETA report cell references are those used in ET Handbook 402, 4th edition.

a. Include all separation determinations that meet the definition for inclusion in the ETA 9052 Nonmonetary Determinations Time Lapse (Detection Date) report in cells c1 (intrastate), c5 (interstate), and c193 (multiclaimant) and for which eligibility was denied based on any of the following issues:

- Voluntary quit (either personal or work connected),
- Discharge,
- Labor dispute, or
- Other separation issue reportable under definitions in ET Handbook 401

b. Exclude denied claims made under the STC, EB, TRA, DUA programs, any temporary Federal-State supplemental compensation programs, or other special programs, such as EUC.

(4) Nonmonetary-Nonseparation Denials

a. Include all nonmonetary-nonseparation determinations that meet the definition for inclusion in the ETA 9052 Nonmonetary Determinations Time Lapse (Detection Date) report in cells c97 (intrastate), c101 (interstate), and c193 (multiclaimant) and for which eligibility was denied based on any of the following issues:

- Able and/or available to work,
- Actively seeking work,
- Disqualifying/unreported income,
- Refusal of suitable work or offer of job referral,
- Refusal of referral to profiling services,
- Failure to report,
- Failure to register with the employment service, or
- Other nonseparation eligibility issue (for example, alien status, athlete, school employee, seasonality, removal of disqualification, and determination of whether claimant's activities or status constitutes service or employment).

b. Exclude denied claims made under the STC, EB, TRA, DUA programs, any temporary Federal-State supplemental compensation programs, or other special programs, such as EUC.

Notes for Separation and Nonseparation Definitions

(1) In general, the ETA 9052 report uses the same definitions as the ETA 207 report (ET Handbook 401, pp. I-4-3 to I-4-12). However, nonmonetary redeterminations, which are reported on the ETA 207 report, are not reported on the ETA 9052 report and should not be included in the DCA separation or nonseparation sampling frames. The following actions are not reportable nonmonetary determinations and should not be included in the DCA separation or nonseparation sampling frames:

- Determinations made solely for deciding whether charges should be made to an employer's experience rating account.

- Routine exploration of facts or questioning claimants in association with the claims taking process except under circumstances of disagreement.

Several examples of routine questioning or decisions that are not countable are provided on pages I-4-4 and I-4-5 of ET Handbook 401.

! Overpayment notices on uncontested earnings detected by any method (for example, crossmatch) should not be included in the DCA nonseparation transactions files.

(2) If nonmonetary determinations that deny eligibility were conducted for more than one issue (for example active work search and pension), or for separation issues involving more than one employer in the base period, separate records should be created for each determination, and only the determination selected for the sample will be investigated. SESAs should distinguish these separate records in the UI transactions file by the transaction date, if the determinations were issued on different dates. If the determinations were issued on the same date, States can use positions 72-80 in the UI transactions file to record the separation or nonseparation issue code, or other identifying information, such as an agency-assigned sequence number. The identifying information can be mapped to the appropriate data element in the rec1.dat file.

(3) A multiclaimant determination based on a single set of facts which applies to two or more similarly situated individuals and which may result in the issuance of one or more notices, depending upon the number of individual claimants involved, should be represented by a single record in the DCA transactions files.

F. UI Transactions File Sort

The records in the UI transactions file are sorted first by transaction (sample) type (item 7) in ascending order: 1) UI paid claims, 2) monetary denials, 3) separation denials, and 4) nonmonetary-nonseparation denials.

Within each sample type records are sorted in ascending order on two keys. For the UI paid claims sampling frame, the primary sort key is the total amount "paid" to the claimant (item 21). For the three denials sampling frames, the primary sort key is the transaction date of the denial (date the denial was issued by the SESA) (item 5). The secondary sort key for all four sample types is the social security number (SSN) (item 3).

When these primary and secondary sorts are completed, the first record in the UI transactions file will correspond to the UI benefits payment (sample type 1) with the smallest amount paid, offset, intercepted, or withheld and the lowest SSN within that amount. The last record among the UI benefits payments in the UI transactions file will correspond to the payment with the largest amount paid, offset, intercepted, or withheld and the highest SSN within that amount. The first record in each of the three denials

sample types (monetary, separation, nonmonetary-nonseparation) will correspond to the denial with the earliest transaction date and the lowest SSN within that date. The last record in each of the three denials sample types will correspond to the denial with the latest transaction date and the highest SSN within that date.

3. Control Record

The control record is a required input to both BAM COBOL programs. COBOL program one checks the validity of the data in the control record and uses the control record to edit some of the data fields in the UI transactions file. COBOL program two uses the control record in its sample selection algorithm.

Record Format of the Control Record

Data Element	Positions	Formats / Edit Criteria
State Code	1-2	2-digit numeric (FIPS); must be 1-56, 72, or 78, except for codes 3, 7, and 14.
Current Week's Batch #	3-8	6-digit numeric in format YYYYWW; YYYY must be < current year; WW must be > 01 and < 53.
UI Paid Claims Random #	9-14	6-digit numeric; implied decimal (.xxxxxx).
Monetary Random #	15-20	6-digit numeric; implied decimal (.xxxxxx).
Separation Random #	21-26	6-digit numeric; implied decimal (.xxxxxx).
Nonmon.-Nonsep. Random #	27-32	6-digit numeric; implied decimal (.xxxxxx).
Batch Week Beginning Date	33-40	8-digit numeric in format MMDDYYYY; MM must be > 01 and < 12; DD must be > 01 and < max. days in MM; YYYY must be < current year.
Batch Week Ending Date	41-48	8-digit numeric in format MMDDYYYY; must be > Batch Week Beginning Date; MM must be > 01 and < 12; DD must be > 01 and < max. days in MM; YYYY must be < current year.
UI Paid Claims Sample Size	49-50	2-digit numeric; must be > 2.

Data Element	Positions	Formats / Edit Criteria
Monetary Denials Sample Size	51-52	2-digit numeric; must be > 2.
Separation Denials Sample Size	53-54	2-digit numeric; must be > 2.
Nonmon.-Nonsep. Denials Sample Size	55-56	2-digit numeric; must be > 2.
Max Pay	57-59	3-digit numeric; whole dollars; the maximum WBA in the State, including dependents' allowances.
Filler	60-80	zero-filled

4. COBOL Population Edit and Sample Selection Programs

The BAM COBOL programs can be compiled on IBM OS/VS or COBOL II compilers. States must write the job control language to compile the source code. Because ADP systems vary from State to State, some SESAs may have to modify the source code in order to successfully compile the COBOL programs on their State ADP systems. States should permanently store the executable (object code) COBOL files in a program library or partition on its ADP system from where it can be run on a routine basis.

The COBOL programs perform the following tasks, which are described in detail in the subsequent sections:

COBOL Program 1

! edits the input control record to identify data element codes which do not meet the specified format or range;
! verifies that the UI transactions file is sorted according to the specifications in section 2 (F), above;
! edits the UI transactions file to 1) identify records with data element codes which do not meet the specified format or range and 2) identify records that meet

the definition for inclusion in the sampling frames for UI paid claims and the three types of denials;

! produces an error report of records which fail any of the edits and the identification of the failed edit(s);

! creates a file consisting of the records in the UI transactions file that meet the definition for inclusion in the sampling frames.

COBOL Program 2

! selects the sample cases according to the prescribed algorithm;

! writes records selected for the samples to the properly formatted output file;

! creates a file of aggregate sample and population information for UI paid claims and the three types of denials, and produces a report for each of the four transaction types which summarizes the aggregate data.

A. Editing the Input Control Record

Both BAM COBOL programs require an input control record, which is prepared by each State. Input control data are used in the sample selection algorithm and to edit the input file of UI transactions. This information includes the two-digit State FIPS code; two eight-digit dates for beginning and ending dates of the batch (weekly sample) being selected; a six-digit number for the batch; four six-digit random start numbers (for sample selection), which are provided by the Department; four two-digit numbers, which are provided by the BAM supervisor, that designate the number of cases to be selected for the weekly UI paid claims, monetary, separation, and nonmonetary-nonseparation denials samples; and the maximum amount of UI benefits payable in the State.

COBOL program one edits the input control record to insure that the fields contain valid entries. If any of the edits fail, the appropriate error message will be displayed and the program will terminate. The required formats and definitions for the input control record data are provided in section 3 of this document.

B. Verifying the Sort of the UI Transactions File

Samples are selected for BAM using a systematic selection algorithm. With systematic selection, the first sample case is selected at random and subsequent cases are selected at a fixed interval. The procedure will therefore produce a sample which reflects the way in which the records in the sampling frame file are sorted. Because of

this, it is critical that the records in the UI transactions file be sorted according to the specifications in section 2 (F) (page III-16).

COBOL program one verifies that:

! The first N_1 records in the file are UI benefit payments (Sample Type "1"), the next N_2 records in the file are monetary denials (Sample Type "2"), the next N_3 records in the file are separation denials (Sample Type "3"), and the last N_4 records in the file are nonmonetary-nonseparation denials (Sample Type "4").

Note: All four types of records may not be present in the file. If more than one type of record is in the file, the program verifies the proper sort sequence, as described in the preceding paragraph. If only one type of record is present, the program verifies that the records are sorted according to the appropriate primary and secondary sort keys, as described in the following two sections.

! The primary sort key for the UI benefit records is the total amount "paid" to the claimant (item 21) (ascending) and the secondary sort key is the social security number (item 3) (ascending).

! The primary sort key for the three denials sampling frames is the transaction date of the denial (date the denial was issued by the SESA) (item 5) (ascending) and the secondary sort key is the social security number (item 3) (ascending).

If the UI transactions file fails the sort edit, the COBOL program will terminate, identify the record(s) out of sequence, and display an error message advising the user to re-sort the UI transactions input file.

C. Editing the UI Transactions File

The COBOL program one uses the following criteria to edit the UI transactions file. The program generates an error report, which will include all records that fail one or more of the edits. Data elements failing an edit will be flagged. An example of the format of the error report is shown on page III-25.

Data Element # and Name	Edit Criteria
1. State I.D. Code	Must be valid numeric FIPS code for SESA from input control record; must be 1-56, 72, or 78, except for codes 3, 7, and 14.
2. Batch Number	Must match batch # in input control record: 6-digit numeric YYYYWW; YYYY must be < current year; WW must be > 01 and < 53.[1]
3. Social Security Number	Must be numeric > 0.
4. Claim Date	8-digit numeric MMDDYYYY; MM must be > 01 and < 12; DD must be > 01 and < max. days in MM; YYYY must be < current year. Can be all zeros if Transaction Type (item 7) equals 3 (separation denial) or 4 (nonmonetary-nonseparation denial) and Claim Type (item 16) equals 0.
5. Transaction Date	8-digit numeric MMDDYYYY; MM must be > 01 and < 12; DD must be > 01 and < max. days in MM; YYYY must be < current year. Must be greater (later) than or equal to Item 4 (Claim Date).[1, 2]

1 Record must meet edit criteria for inclusion in sampling frame.
2 Edit criteria may vary from State to State for this item. In some States it is possible for the Transaction Date to be greater than the Run Date, so this data element is edited against the Claim Date.

Data Element # and Name	Edit Criteria
5. Transaction Date (Continued)	If Transaction Type (item 7) equals 1, 3, or 4: Must be greater (later) than or equal to Batch Week Beginning Date from input control record.[1] Must be less (earlier) than or equal to Batch Week Ending Date from input control record.[1] If Transaction Type (item 7) equals 2 (monetary denial): Must be greater (later) than or equal to 14 days prior to the Batch Week Beginning Date from input control record.1[1] Must be less (earlier) than or equal to 14 days prior to the Batch Week Ending Date from input control record.[1]
6. Sample Selection Indicator	Must equal 2.
7. Transaction (Sample) Type	Must equal 1, 2, 3, or 4.[1]
8. Gender	Must equal 1, 2, or 8 (INA).
9. Date of Birth	6-digit numeric MMYYYY; MM must be > 01 and < 12; YYYY must be > (current year - 100) and < YYYY of Item 4 (Claim Date); can be 0001 (INA).
10. Ethnic Classification	Must equal 1-5 or 8 (INA).

1 Record must meet edit criteria for inclusion in sampling frame.

Data Element # and Name	Edit Criteria
11. Program Type	Must equal 1-7 (UI, UCFE, UCX, UI-UCFE, UI UCX, UI-UCFE-UCX, UCFE-UCX), or 9 (missing).[1]
12. Unemployment Duration Code	Must equal 1 (regular UI) or 3 (State additional, no EB).[1]
13. Amount Paid to Claimant	Must be equal to or less than max. WBA from input control record. Can be all zeros.
14. Amount Offset Applied	Must be equal to or less than max. WBA from input control record. Can be all zeros.
15. Amount of Intercept or Withholding	Must be equal to or less than max. WBA from input control record. Can be all zeros.
16. Claim Type	For UI paid claims (Sample Type "1"): must equal 12, 13, or 14.[1] For monetary denials (Sample Type "2"): must equal 01 (new) or 03 (transitional).[1] For separation denials (Sample Type "3"): must equal 01 (new), 02 (additional), 12 to 14 (week claimed) or 00 (no week claimed).[1] For nonmonetary-nonseparation denials (Sample Type "4"): must equal 01 (new), 02 (additional), 03 (transitional), 04 (reopened claim), 12 to 14 (week claimed) or 00 (no week claimed). Denied claims for waiting week credit should be coded 13.[1] If Claim Type = 12 or 14, item 21 must be > 0.

1 Record must meet edit criteria for inclusion in sampling frame.

Data Element # and Name	Edit Criteria
17. Filing Status Indicator	Must equal 1 (intrastate) or 2 (interstate liable).[1]
18. Workshare Percentage	Must equal 00.[1]
19. Run Date for Program	8-digit numeric MMDDYYYY; can be all zeros; If greater than 0: MM must be > 01 and < 12; DD must be > 01 and < max. days in MM; YYYY must be < current year. Must be greater (later) than Item 4 (Claim Date). Must be greater (later) than or equal to Batch Week Beginning Date from input control record.
20. Adjustment Indicator	Must equal 1 or 2. Must equal 1 if Item 16 = 15.
21. Total Amount "Paid" to Claimant	Must be equal to the sum of items 13, 14 and 15. Must be equal to or less than max. WBA from input control record. Can be all 0's. For UI paid claims (Sample Type"1"): item 21 must be greater than 0.[1] For monetary denials (Sample Type "2"): item 21 must equal 0.[1] For separation and nonmonetary nonseparation denials (Sample Types "3" or "4"): item 21 can be equal to or greater than 0.[1]

1 Record must meet edit criteria for inclusion in sampling frame.

BAM UI Transactions File Error Report

Page 1 **State of** XX **Run Date** 01/08/2001

Field	Code	Field	Code	Field	Code
1	99	2	199701	3	111223333
4	12281996	5	01031997	6	2
7	1	8	1	9	071971
10	1	11	1	12	1
13	180	14	000	15	000
16	13	17	3*	18	00
19	01051997	20	2		
1	99	2	199701	3	444556666
4	12071996	5	12301996	6	2
7	3	8	0+	9	111968
10	3	11	2	12	1
13	000	14	000	15	000
16	01	17	1	18	00
19	01051997	20	2		

***** Field failed edit for inclusion in sampling frame.
+ Field failed coding edit.

D. Extract Flag for UI Paid Claims and Denials Sampling Frames

The information that is collected for the cases in the BAM samples is used to make inferences about the claimant population. To ensure that these inferences are statistically reliable, the populations must be defined consistently each week. The COBOL program performs this task by editing the UI transactions file to insure that only those records defined in section 2 (E) are included in the UI paid claims and monetary, separation, and nonmonetary-nonseparation denials sampling frames.

A record in the UI transactions file must meet several criteria, which are denoted in section 4 (C), to be included in the sampling frame file. COBOL program one sets an extract flag for each field (data element) that meets the selection criteria. Records meeting all of the criteria will be written to a sampling frame file from which the four BAM samples are selected.

E. Selecting the UI Paid Claims and Denials Samples

COBOL program two uses a systematic random sampling procedure to select the UI paid claims and three denials samples from the sampling frames created each week. The COBOL program uses the sample sizes and random start numbers from the input control record in the sample selection algorithm.

The weekly sample sizes and random start numbers are provided by the Department for each State for inclusion in the input control record. The random start numbers must be updated in the input control record each week. The annual sample sizes for UI paid claims and the three types of denials are fixed by the Department for the calendar year. BAM supervisors may change the weekly sample sizes in the input control record to accommodate investigator vacation schedules or other staffing contingencies. However, SESAs are expected to pull at least the minimum number of cases each week. States may not over sample during a portion of the year in order to meet the annual sample allocation and then suspend sampling for the remainder of the calendar year. The minimum weekly and quarterly samples, based on current annual sample allocations are:

Sample	Annual Allocation	Normal Weekly	Minimum Weekly	Normal Quarterly	Minimum Quarterly
Paid Claims	360*	7	5	90	81
Paid Claims	480	9	6	120	108
Denials	150 / 450**	3	2	37-38	32

* Allocation for ten smallest States in terms of UI workload.
** 150 cases each of monetary, separation, and nonmonetary-nonseparation denials will be selected each year, for a total of 450 DCA cases.

F. Systematic Sampling Procedure

COBOL program two counts the number of records included in the sampling frame. A skip interval is computed by dividing the number of records in the sampling frame by the number of records to be sampled that week. The first sample case selected is determined by multiplying the skip interval by the random start number assigned in the input control record for that sample (UI paid claims, monetary, separation, or nonmonetary-nonseparation denials). The random start number is a six-place decimal with a value greater than zero and less than one. The product of the skip interval and the random start number is rounded to the nearest integer. If the rounded integer is zero, the case corresponding to the rounded skip interval is selected as the first case in the sample.

For example, assume the following:

Number of Records in the Sampling Frame (N) = 118

Random Start Number (r) = .260903.

Total Number of Cases to be Sampled (n) = 4.

Skip interval (k) = 118 / 4 = 29.5

Initial case selected (i) = .260903 x 29.5 = 7.697 = 8 (rnd)

Record 8 in the sampling frame is the first record selected for the sample.

Subsequent cases are selected using systematic sampling.

1. Select the initial sample case as described above.

2. Select the next (n-1) cases by adding multiples of the skip interval (k), rounded to the nearest integer, to the case number of the initial selection (i): i + round(jk), where j = 1,2,...,(n - 1).

In the example, cases 8, 38, 67, and 97 will be selected from the sampling frame of 118 records.

If the last case designated for selection by the sampling algorithm is greater than the size of the sampling frame (N), the case will be selected from the beginning of the sampling frame. That is, the sampling frame will be considered to be circular. For example, if the last case selected is N + 1, the 1st case in the sampling frame will be selected.

The general rule is:

if (i + round(jk)) > N, select case h, where h = [(i + round(jk)) - N] and $1 \leq h < i$.

The Sample Selection Indicator will be changed from a value of 2 to a value of 1 for all records selected for one of the four samples: UI paid claims, monetary denials, separation denials, and nonmonetary-nonseparation denials.

G. Output Files and Reports

After the sample selection procedure has been completed, COBOL program two produces two output files and related reports:

1. HITFILE (see example on next page) consists of the records selected for the samples. The records in this file are in the same format and sort sequence as the UI transactions file: UI paid claims records will be written first, followed by monetary, separation, and nonmonetary-nonseparation denials.

The SSNs and claim dates of the sample cases are used to query the SESA database to create a file of claimant data, rec1.dat, which is used in investigating the accuracy of the payment or denial. The rec1.dat file is described in section 5, “Downloaded Files”.

JOB [JOB NO.] **[STATE] EMPLOYMENT SECURITY COMMISSION**
RUN DATE: 01/08/2001 **HITFILE OF BAM SAMPLE CASES**

```
99280101111223333122820001231200011107197111104000000013100010820012040000000000
99280101444556666122820000103200111202196811107500000013100010820012075000000000
99280101777889999122120001230200011211196222114500000013100010820012145000000000
99280101111335555122820000102200111108819653110251500000131000108200121750000000000
99280101222446666122120001230200011210194812120000000013100010820012200000000000
99280101777991357122820000103200111104197451122500000013100010820012225000000000
99280101444668642122820001230200012203197011100000000011000108200120000000000000
99280101999119753122820000103200112101195723100000000011000108200120000000000000
99280101666880123122120001231200013111219551110000000011000108200120000000000000
99280101555004321122820000103200113205197741100000000021000108200120000000000000
99280101888224466122820001230200014209195021100000000013100010820012000000000000
99280101987654321122120000102200114102195911100000000013100010820012000000000000
```

SESA BAM supervisors may request additional information for each case sampled, for example the claimant's name, local address, phone number, and UI claim history or wages. These optional data elements will be produced only for the benefit of the SESA BAM unit and will not be picked up by the Department. State optional data must be downloaded in the format described in section 5 and is currently available only for paid claims. A future release of the DCA software will accommodate State option data for denied claims.

In addition to creating the HITFILE, the COBOL program will produce a hard copy report consisting of all of the UI transactions file data elements for each of the sampled cases:

2. sfsum.dat (see example on page III-38) consists of aggregate data for the population and sample cases for several claimant characteristics: gender, ethnic group, age, and program type. In addition to these characteristics, the amount paid to the claimant will be used to check the validity of the UI paid claims population and sample. This summary data is used to check the representativeness of the weekly UI paid claims and denials samples. This file is analogous to the PRELUDE_SF_SUM file created by the original BAM COBOL program, although the format of this file is different from PRELUDE_SF_SUM. The sfsum.dat file is described in section 5.

In addition to creating the sfsum.dat file, the COBOL program will produce a hard

copy report consisting of the data elements described in Attachment C for each of the four sample types. The following are examples of the SFSUM hard copy reports for the UI paid claims and monetary denials samples and populations.

JOB [JOB NO.] **[STATE] EMPLOYMENT SECURITY COMMISSION**
SFSUM REPORT

RUN DATE: 01/08/2001 **TRANSACTION TYPE: 1 - UI BENEFITS**

State: 99 **Batch: 200101**

SIZE	06	005382
DOLLARS	00860	000805231
VARIANCE	2718.432	2919.341
MALE	03	002823
FEMALE	03	002559
GENDER MISS	00	000000
WHITE	03	003542
NON-WHITE	03	001840
ETHNIC MISS	00	000000
AGE < 25	01	000639
AGE 25-34	03	001863
AGE 35-44	01	001295
AGE 45-64	01	000871
AGE 65+	00	000714
AGE MISS	00	000000
< $51	01	000540
$ 51-$100	01	000904
$101-$150	01	001482
$151-$200	02	001983
$201+	01	000473
AMOUNT MISS	00	000000
UI	06	005001
UCFE/UCX	00	000381
PROGRAM MISS	00	000000
SKIP INTERVAL		000897
RANDOM NUMBER		217658
FIRST SELECT		000195

JOB [JOB NO.] [STATE] EMPLOYMENT SECURITY COMMISSION
SFSUM REPORT

RUN DATE: 01/08/2001 TRANSACTION TYPE: 2 - MONETARY DENIALS

State: 99 **Batch: 200101**

SIZE	02	000245
MALE	01	000132
FEMALE	01	000113
GENDER MISS	00	000000
WHITE	01	000177
NON-WHITE	01	000068
ETHNIC MISS	00	000000
AGE < 25	00	000021
AGE 25-34	01	000073
AGE 35-44	01	000065
AGE 45-64	00	000048
AGE 65+	00	000038
AGE MISS	00	000000
UI	02	000202
UCFE/UCX	00	000043
PROGRAM MISS	00	000000
SKIP INTERVAL		000123
RANDOM NUMBER		725190
FIRST SELECT		000089

H. COBOL Program Specifications

A description of the COBOL program modules, installation procedures, and the technical specifications of the input and output files are provided in Attachment A.

5. Downloaded Files

Each week, two files are downloaded from the SESA mainframe ADP system to the UI Sun ADP system: rec1.dat, which consists of claimant data obtained from the SESA database for the cases selected for the four BAM samples, and sfsum.dat, which is created by COBOL program two. The Department will provide software to convert data in these files to the Informix database on the Sun computer. This software requires the

data passed from the SESA mainframe to the Sun computer to be in a specific format. It is the responsibility of the SESA to assure that data transferred to the Sun computer adhere to these formats, which are described in detail below.

SESA data processing staff are also responsible for any modifications to the job control language of the COBOL program and any additional programming needed to download the rec1.dat and sfsum.dat files to the Sun computer, using ftp or another file transfer utility, for example. States are responsible for securing login permission and permission to download files from their State ADP system to the Sun computer.

States may choose to manually enter the population and sample comparison data and sample case information into the Sun computer by using the software provided by the Department. The procedures for UI paid claims data are described in ET Handbook No. 400, Unemployment Insurance Benefit Quality Control ADP User Guide.

A. Output File of Sampled Cases

COBOL program two creates a file of records selected for the UI paid claims and three denials samples (HITFILE). This file is used to query the SESA database to identify information on an individual claimant including demographic characteristics, employment history, benefit year data, and information specific to the initial or continued claim. Data reflect status at the time of sample selection for such items as number of base period employers, base period wages, weekly benefit amount, etc. All data available in the SESA UI databases must be extracted to create the rec1.dat file for downloading to the Sun computer.

The control keys for selecting data from the SESA database are social security number (SSN) and claim date, which is the effective date of the initial claim or the week ending date of a week claimed.

1. Timing and Frequency. SESAs will create the rec1.dat file each week as soon as possible after the samples of UI benefit payments and denied UI claims have been selected by the COBOL program. The file must be available on Monday morning for assignment of cases to the BAM investigators. The file is downloaded to the Sun computer either electronically or by tape and stored in /opt/bqc/data/tmp/rec1.dat.

2. Data Element Definition. The data elements and formats for rec1.dat records are provided in Attachment B. Some of the fields may be missing, optional, or not applicable and are left blank, as indicated.

3. Data Corrections. Experience from the BAM program has shown that claimants are occasionally sampled in error, or that claimant identifiers change during the course of an investigation. The BAM supervisor will normally be the person who identifies sample or identifier errors. Provisions have been made for reconciliation of

either of these errors on the Sun computer system. Upon the written request of the SESA, the Department will log on to the Sun computer in order to code a sample case that does not meet the definition for inclusion in the UI paid claims or denials universe. The Sun computer cannot correct errors on the SESA mainframe. Therefore, the BAM supervisor is responsible for alerting the SESA ADP unit regarding changes or errors.

4. File Format for Transfer to the Sun Computer. States must download the rec1.dat file from their mainframe computer to the Sun ADP system. These data are stored in the UI database on the Sun. Successful case conversion depends on fixed formats and file-naming conventions, which are described in this section. SESAs are responsible for the programming which creates the rec1.dat file in the required format.

Each record in the rec1.dat file consists of ten 80-character lines. The total size of each record is 800 bytes. Positions 1 through 79 of each line must contain data or spaces (HEX ‘20', octal ‘040', for example). Position 80 on each line must be coded with a line feed (ASCII - 10, HEX ‘0A’, EBCDIC 25, octal ‘012', for example).

The first three lines are defined by the Department and cannot be changed. As indicated in the following table, some fields wrap from one line to the next line. Line four is reserved for future use and will remain blank. The remaining six lines are reserved for State use and can contain such information as the names and addresses of UI claimants. BAM supervisors are responsible for providing the record formats of optional fields to their ADP staffs. All ten lines must be formatted and transferred whether or not the State optional lines are used for data. Positions not used for data must be filled with spaces, not null.

The following table summarizes the contents of each line of the rec1.dat file record. The data elements and formats for rec1.dat records are provided in Attachment B.

Line #	rec1.dat Data Element Numbers	Positions
1	Items 1 thru 24 (first position)	1 - 79
2	Items 24 (last position) thru 50	80 - 158
3	Items 51 thru 59 (68 spaces reserved in remainder of line 3)	159 - 169 (170 - 237)
4	Leave blank (spaces); reserved for future use.	
5-10	Lines reserved for State use.	

Note: Positions refer to the format of the rec1.dat file record in Attachment B.

An example of a rec1.dat file (partial listing of records) is shown on the following page.

Example of rec1.dat File

```
14442328099199906012219990112      11811061961111208021998       07181998
 0099405630         37509750                           1375
      5  1



16446356299199906012219990510      55002101957111201101999       12121998
 0117756170         29907774                           1307
      5  1



17130787199199906012019990204      31012281934111212061998       09101998
 0258105170         37509750                           1375
      5  1



17740674999199906010219990420      13004281951121202081998       01251998
 0201185270         07501950                           1075
      5  1



18246211799199906012019990208      21005101955211207261998       05021998
 0225502300         16504290                           1145
      5  1



18938904099199906012219990616      51012261948111201031999       12101998
 0288725490         29607696                           1296
      5  1
```

B. Population and Sample Comparison File

COBOL program two will aggregate population and sample data for selected claimant characteristics to evaluate the statistical validity of the UI paid claims and denials samples. These aggregated data are written to the sfsum.dat file and is downloaded to the UI Sun computer either electronically or by tape. The file will be stored in /opt/bqc/data/tmp/sfsum.dat on the Sun computer. Software provided by the Department will store the aggregated data in the UI database. The Department will pick up this data for storage on the National Office UI database.

This file will include the following information:

1) The total size of the UI paid claims or denials population file from which the sample was selected.

2) The skip interval (K) calculated.

3) The random start number provided by the Department and specified in the input control record.

4) The sequence number of the first sampled case.

5) Aggregate sample and population data for gender, ethnic group, age, and program. For UI paid claims, aggregate sample and population data for the amount paid to the claimant and the sample and population variances for the amount paid will also be produced.

File Format. The sfsum.dat file consists of four records of three 80-character lines, which are summarized in the following table. Position 80 of each line is coded with a line feed. The first record in the file is for UI paid claims, followed in order by records for monetary, separation, and nonmonetary-nonseparation denials. The data elements and formats for sfsum.dat records are provided in Attachment C.

Line #	sfsum File Data Element Numbers	Positions
1	Items 1 thru 19 (first 4 positions)	1 - 79
2	Items 19 (last 2 positions) thru 39 (first 3 positions)	80 - 158
3	Items 39 (last 3 positions) thru 53 (6 spaces reserved in remainder of line 3)	159 - 231 (232-237)

Note: Positions refer to the format of the sfsum.dat file record in Attachment C.

Example of sfsum.dat File

Attachment A

UI BAM Population Edit and Sample Selection COBOL Program Specifications and Installation

Installation of the COBOL Programs

The BAM denials COBOL software consists of two source code files: the edit program and the sampling program. The source program code is written in ASCII. Transfer the COBOL program source code files from the UI Sun computer to your State mainframe computer system or network.

The two programs must be compiled separately and given names consistent with the naming conventions at your State's ADP site. The programs have been compiled and tested under both IBM OS/VS COBOL and COBOL II. If the program code will be compiled using a different compiler, the source code may need to be modified to conform to your local ADP environment. After compiling the COBOL program source code, permanently store the executable (object code) files in a program library or partition on your State's ADP system where it can be run on a routine basis.

In the redesign of the COBOL program all internal COBOL sorts have been replaced with SORT utility steps that run before the edit program. Sample JCL for executing the programs on IBM compatible systems is provided at the end of this section.

The main processing steps are as follows:

1. Using programs specific to your ADP site, create the weekly file of UI benefit payments in the new format, as described in section 2 of this documentation.

2. Using a sort control statement similar to the one in step 010 in the sample JCL, sort the UI payment transactions by total amount paid and by SSN.

3. Using programs specific to your site, create a transactions file for the three types of denials: monetary, separation and nonmonetary-nonseparation.

4. Using a sort control statement similar to the one in step 020 in the sample JCL, sort the denials transactions by TRANTYPE, TRANYYYY, TRANMMDD, and SSN.

5. Concentrate the UI payment and denial files (step 030).

6. Execute the edit program to create the sampling frame and error report (step 040).

7. Execute the sampling program to create the HITFILE (sample cases) and SFSUM files (step 050).

8. Using programs specific to your ADP site, create the rec1.dat file in the new format, as described in section 5 and Attachment B of this documentation.

COBOL Program Files

1. Input Files

a. UI Transactions File

This file contains all the weekly UI transactions records, which contain data extracted from the SESA mainframe database.

record order:	UI paid claims (Transaction Type 1): amount paid, offset, intercepted, withheld or deducted (item 21 in UI transactions record) and social security number (item 3), in ascending order; Monetary, separation, and nonmonetary-nonseparation denials (Transaction Types 2, 3, and 4): transaction date (item 5 in UI transactions record) and social security number (item 3), in ascending order.
access mode:	sequential
record length:	80 bytes
retention:	save on tape or disk for 120 days

b. Control Record

This file contains a single record which provides control information for each weekly run (for example, random number, number of records to be sampled each week, batch number, etc.). Certain data in the record must change each week (batch #, random #, and dates).

access mode:	single record
record length:	80 bytes
retention:	none

2. Output Files and Reports

a. Error Listing

This report consists of records in the UI transactions file for which the COBOL program has identified data range, format, or relational errors. The report should be reviewed to correct data value or format problems.

b. Sampling Frame of UI Transactions

This file contains all records meeting the edit criteria for inclusion in the UI paid claims, monetary denials, separation denials, and nonmonetary-nonseparation denials sampling frames.

record order:	Same as UI Transactions File
access mode:	sequential
record length:	80 bytes
output media:	disk or tape
retention:	none

c. HITFILE

This file contains the records selected for the four BAM samples: UI paid claims and monetary, separation, and nonmonetary-nonseparation denials. Record format is the same as the UI transactions file. The HITFILE is used to extract data from the State's UI database to create the rec1.dat file, which is downloaded to BAM tables in the UI database on the Sun computer.

record order:	Same as sampling frame and transactions file
access mode:	sequential
record length:	80 bytes
output media:	disk or tape
retention:	optional

d. sfsum.dat

This file contains aggregate sample and population data for the four types of UI transactions included in BAM: UI paid claims and monetary, separation, and nonmonetary-nonseparation denials. The data consists of selected characteristics which are used to weigh the BAM data and conduct statistical

tests of sample validity. Data in this file is downloaded to the b_comparison table in the UI database on the Sun computer.

access mode:	sequential
record length:	80 bytes (3 lines per record)
output media:	disk or tape
retention:	retain hard copy SFSUM report for 120 days; data in the b_comparison and b_dca_comparison tables in the UI database are permanently retained on disk or archived.

Sample Job Control Language

```
//*************************************************
//*  SAMPLE JCL TO SORT 'ALLOW' AND 'DENY' TRANSACTIONS AND RUN
//*  THE EDIT AND SAMPLE PROGRAMS.
//*  STEP010 – SORT UC TRANS BY TOTAL PAID, SSN
//*  STEP020 – SORT DENIAL TRANS BY TRANTYPE, TRANYYYY, TRANMMDD, //*
AND SSN
//*  STEP030 – CONCATENATE THE TWO FILES (TRANTYPES 1,2,3,4)
//*  STEP040 – EDIT THE CONTROL AND TRANSACTION FILES
//*  STEP050 – CREATE HITS AND SFSUM FILES
//*************************************************
//STEP 010 EXECPGM=SORT
//SORTIN DD DSN=YOUR.INITIAL.CLAIMS.TRANSACTIONS,
//         DISP=(OLD,DELETE,KEEP)
//         DD DSN=YOUR.CONTINUED.CLAIMS.TRANSACTIONS,
//         DISP=(OLD,DELETE,KEEP)
//SORTOUT DD DSN=YOUR.SORTED.TYPE1.TRANSACTIONS,
//         UNIT=STORAGE,MGMTCLAS=IMSTD,
//         DISP=(NEW,CATLG,DELETE),AVGREC=K,
//         DCB=(LRECL=80,RECFM=FB),
//         SPACE=(80,(50,20),RLSE)
//SYSOUT DD SYSOUT=*
//SYSIN DD  *
  SORT FIELDS=(69,3,CH,A,9,9,CH,A)
//*
//STEP020 EXEC PGM=SORT
//SORTIN DD
DSN=YOUR.UNSORTED.DENIALS.TRANS,DISP=(OLD,DELETE,KEEP)
```

```
//SORTOUT DD DSN=YOUR.SORTED.DENIALS,TRANS,
//          UNIT=STORAGE,MGMTCLASS=IMSTD,
//          DISP=(NEW,CATLG,DELETE),AVGREC=K,
//          DCB=(LRECL=80,RECFM=FB),
//          SPACE=(80, (30,10),RLSE)
//SYSOUT DD SYSOUT=*
//SYSIN DD  *
  SORT FIELDS=(35,1,CH,A,30,4,CH,A,26,4,CH,A,9,9,CH,A)
//*
//STEP030 EXEC PGM=IEBGENER
//SYSUT1 DD DSN=YOUR.SORTED.TYPE1.TRANSATIONS,
//          DISP=(OLD,DELETE,KEEP)
//         DD DSN=YOUR.SORTED.DENIALS.TRANS,DISP=(OLD,DELETE,KEEP)
//SYSUT2 DD DSN=YOUR.UNEDITED.TRANSACTIONS.FILE,
//          UNIT=STORAGE,MGMTCLAS=IMSTD,
//          DISP=(NEW,CATLG,DELETE),AVGREC=K,
//          DCB=(LRECL=80,RECFM=FB),
//          SPACE=(80,(30,10),RLSE)
//SYSPRINT DD SYSOUT=*
//SYSIN    DD DUMMY
//*
//STEP040 EXEC PGM=?????? /*YOUR NAME FOR THE EDIT PROGRAM*/
//INCNTRL   DD DSN=YOUR.NAME.FOR.THE.CONTROL.FILE,DISP=SHR
//INTRAN   DD
DSN=YOUR.UNEDITED.TRANSACTION.FILE,DISP=(OLD,DELETE,KEEP)
//OTTRAN  DD DSN=YOUR.NAME.FOR.THE.SAMPLE.FRAME,
//          MGMTCLAS=IMSHORT,STORCLAS=ISFAST,
//          DISP=(NEW,CATLG,DELETE),AVGREC=K,
//          DCB=(RECFM=FB,LRECL=80),
//          SPACE=(80,(100,100),RLSE)
//OTERROR   DD SYSOUT=*,
//          DCB=(RECFM=FBA,LRECL=81)
//SYSOUT   DD SYSOUT=*
//SYSABEND   DD SYSOUT=*
//SYSUDUMP   DD SYSOUT=*
//SYSABOUT   DD SYSOUT=*
//SYSDBOUT   DD SYSOUT=*
//*
//STEP050 EXEC PGM=?????? /*YOUR NAME FOR THE SAMPLING PGM*/
//INCNTRL   DD DSN=YOUR.NAME.FOR.THE.CONTROL.FILE,
```

```
//          DISP=SHR
//INTRANS   DD DSN=YOUR.NAME.FOR.THE.SAMPLE.FRAME,
//          DISP=(OLD,DELETE,KEEP)
//OTPRINT   DD SYSOUT=*,
//          DCB=(RECFM=FBA,LRECL=133)
//OTSAMPL   DD DSN=YOUR.NAME.FOR.THE.HITS.FILE,
//          DISP=(NEW,CATLG,DELETE),
//          SPACE(80,(5,2),RLSE),AVGREC=K,
//          DCB=(RECFM=FB,LRECL=80)
//OTSFSUM   DD DSN=YOUR.NAME.FOR.THE.SFSUM.FILE,
//          DISP=(NEW,CATLG,DELETE),
//          SPACE=(80,(5,2),RLSE),AVGREC=K,
//          DCB=(RECFM=FB,LRECL=80)
//SYSOUT   DD SYSOUT=*
//SYSABEND   DD SYSOUT=*
//SYSUDUMP   DD SYSOUT=*
//SYSABOUT   DD SYSOUT=*
//SYSDBOUT   DD SYSOUT=*
//*
```

Attachment B

Record Format for rec1.dat File

Item #	Name	Field Size	Positions	Formats/Codes[1]
1	Social Security #	9	1-9	9-digit SSN (State use only)
2	State ID	2	10-11	2-digit FIPS Code
3	Batch Number	6	12-17	YYYYWW
4	Claim Date (Week Ending or Effective Date)	8	18-25	MMDDYYYY
5	Local Office Number	4	26-29	SESA assigned #
6	U.S. Citizen	1	30	1 to 3 or blank
7	Education	2	31-32	00 to 12, 14 to 16, 20 or Blank
8	Voc/Tech Training	1	33	1 to 3 or Blank
9	In Training	2	34-35	00, 11 to 14, 21 to 24, or Blank
10[2]	Occupation Code (Last Employer)	3	36-38	3-digit major and minor SOC/O*NET code or Blank

[1] Unless otherwise noted, refer to Chapter IV for paid claims and Chapter VIII for denied claims for data element codes.
[2] Required for UI paid claims cases only; leave blank for denials cases.

Item #	Name	Field Size	Positions	Formats/Codes[1]
11	Date of Birth	8	39-46	MMDDYYYY or Blank
12	Gender	1	47	1, 2 or Blank
13	Ethnic Classification	1	48	1 to 5 or Blank
14	Program Code	1	49	1 to 8 or Blank
15	Combined Wage	1	50	1 to 6 or Blank
16	Benefit Yr. Beginning	8	51-58	MMDDYYYY or Blank
17	Initial Claim Filing Method	1	59	1 to 5 or Blank
18[2]	# Prior Nonsep Issues	2	60-61	2 digits or Blank
19[2]	# Prior Nonsep Issues (Disqualifying)	2	62-63	2 digits or Blank
20	Reason for Separation (Before Investigation)	2	64-65	10 to 69 or Blank
21	Date of Separation (Before Investigation)	8	66-73	MMDDYYYY or Blank
22	Recall Status (Before Investigation)	1	74	0, 1, 2 or Blank

[1] Unless otherwise noted, refer to Chapter IV for paid claims and Chapter VIII for denied claims for data element codes.
[2] Required for UI paid claims cases only; leave blank for denials cases.

Item #	Name	Field Size	Positions	Formats/Codes[1]
23	NAICS Last Employer	4	75-78	4-digit industry group NAICS code or Blank
24	# Base Period Employers (Before Investigation)	2	79-80	2 digits or Blank
25	Base Period Wages (Before Investigation)	6	81-86	6 digits (whole dollars) or Blank
26	NAICS Primary Base Period Employer	4	87-90	4-digit industry group NAICS code or Blank
27	High Quarter Wages (Before Investigation)	5	91-95	5 digits (whole dollars) or Blank
28	# Weeks Worked in BP (Before Investigation)	3	96-98	3 digits or Blank
29	WBA (Before Investigation)	3	99-101	3 digits (whole dollars) or Blank
30	MBA (Before Investigation)	5	102-106	5 digits (whole dollars) or Blank
31	Monetary Redeterm. (Before Investigation)	1	107	1,2, or Blank
32	Remaining Balance (after week paid or denial determination)	5	108-112	5 digits (whole dollars) or Blank

[1] Unless otherwise noted, refer to Chapter IV for paid claims and Chapter VIII for denied claims for data element codes.

Item #	Name	Field Size	Positions	Formats/Codes[1]
33	# Dependents Claimed (Before Investigation)	2	113-114	2 digits, 00, or Blank
34	Dependents Allowance (Before Investigation)	3	115-117	3 digits (whole dollars) or Blank
35[2]	First CWE Date	8	118-125	MMDDYYYY or Blank
36[2]	Date of First Payment	8	126-133	MMDDYYYY or Blank
37[2]	KW Cert. Method	1	134	1 to 3 or Blank
38	Week Claimed/Paid Filing Method	1	135	1 to 5 or Blank
39	Amount Paid and/or Offset for KW	3	136-138	3 digits (whole dollars) or Blank
40	Total Earnings for KW (Before Investigation)	3	139-141	3 digits (whole dollars), 000, or Blank
41	Earnings Deduct. For KW (Before Investigation)	3	142-144	3 digits (whole dollars), 000, or Blank

[1] Unless otherwise noted, refer to Chapter IV for paid claims and Chapter VIII for denied claims for data element codes.
[2] Required for UI paid claims cases only; leave blank for denials cases.

Item #	Name	Field Size	Positions	Formats/Codes[1]
42	Other Deduct. Income for KW (Before Investigation)	3	145-147	3 digits (whole dollars), 000, or Blank
43	Other Deduction for KW (Before Investigation)	3	148-150	3 digits (whole dollars), 000, or Blank
44	Required to Seek Work	1	151	1 to 5 or Blank
45	JS Registration Req.	1	152	1, 2 or Blank
46	Actively/Currently Registered with JS	1	153	1, 2 or Blank
47	Reason JS Reg. Deferred	1	154	1 to 6 or Blank
48	# of JS Referrals	2	155-156	2 digits or Blank
49	Union Referral Status	1	157	0 to 3 or Blank
50[5]	Union Service	1	158	0 to 3 or Blank
51[5]	Union Assistance Requested	1	159	1, 2 or Blank
52[5]	Claimant Union Assisted	1	160	1, 2 or Blank
53[5]	Monetary Denial Reason	2	161-162	00 thru 59 or Blank
54[5]	Nonmonetary-Nonseparation Denial Reason	2	163-164	00 thru 79 or Blank

[1] Unless otherwise noted, refer to Chapter IV for paid claims and Chapter VIII for denied claims for data element codes.

[5] Data element added for denial claims.

Item #	Name	Field Size	Positions	Formats/Codes[1]
55[5]	Claim Type	1	165	0 to 5
56[5]	Initial Determination Appealed[6]	1	166	0 to 3 or Blank
57[5]	Result of Initial Determination Appeal[6]	1	167	0 to 6 or Blank
58[5]	Sample Type	1	168	1 to 4
59	Ethnicity	1	169	0, 1 or Blank

[1] Unless otherwise noted, refer to Chapter IV for paid claims and Chapter VIII for denied claims for data element codes.

[5] Data element added for denied claims.

[6] Appeal status at time case was selected for sample; data element can be updated if status changes before case is closed.

Attachment C

Record Format for sfsum.dat File
(All Fields are Numeric)

Item #	Name	Field Size	Positions
1	Batch	6	1-6
2[1]	Sample Type	1	7
3	Sample Size	2	8-9
4	Population Size	6	10-15
5[2]	Random Start #	6	16-21
6[3]	Skip Interval	6	22-2
7	Initial Case Selected	6	28-33
8	Sample – Male	2	34-35
9	Population – Male	6	36-41
10	Sample – Female	2	42-43
11	Population – Female	6	44-49
12	Sample – Gender Missing	2	50-51

[1] The first record will be for UI paid claims (sample type = 1), followed by monetary denials (sample type =2). separation denials (sample type = 3), and nonmonetary-nonseparation denials (sample type =4).
[2] Reported with six digits, implied decimal (.xxxxxx).
[3] Reported with one implied decimal (xxxx.xx).

Item #	Name	Field Size	Positions
13	Population – Gender Missing	6	52-57
14	Sample – White	2	58-59
15	Population – White	6	60-65
16	Sample – Non-white	2	66-67
17	Population – Non-white	6	68-73
18	Sample – Ethnic Missing	2	74-75
19	Population – Ethnic Missing	6	76-81
20	Sample – Age < 25	2	82-83
21	Population – Age < 25	6	84-89
22	Sample – Age 25-34	2	90-91
23	Population – Age 25-34	6	92-97
24	Sample – Age 35-44	2	98-99
25	Population – Age 35-44	6	100-105
26	Sample – Age 45-64	2	106-107
27	Population – Age 45-64	6	108-113
28	Sample – Age 65+	2	114-115
29	Population – Age 65+	6	116-121
30	Sample – Age Missing	2	122-123

Item #	Name	Field Size	Positions
31	Population – Age Missing	6	124-129
32[4]	Sample – UI Program	2	130-131
33[4]	Population – UI Program	6	132-137
34[5]	Sample – UCFE/UCX	2	138-139
35[5]	Population – UCFE/UCX	6	140-145
36	Sample – Program Missing	2	146-147
37	Population – Program Missing	6	148-153
38[6]	Sample - <= $50 Paid	2	154-155
39[6]	Population - <= $50 Paid	6	156-161
40[6]	Sample - $51-100 Paid	2	162-163
41[6]	Population - $51-100 Paid	6	164-169
42[6]	Sample - $101-150 Paid	2	170-171
43[6]	Population - $101-150 Paid	6	172-177
44[6]	Sample - $151-200 Paid	2	178-179

[4] UI program codes include regular UI, UI-UCFE, UI-UCX or UI-UCFE-UCX (program type codes 1, 2, 3, and 4 in the UI transactions file).

[5] Program codes include UCFE and/or UCX only (program type codes 5, 6 and 7 in the UI transactions file).

[6] For the monetary, separation, and nonmonetary-nonseparation denials, this item will equal zero.

Item #	Name	Field Size	Positions
45[6]	Population - $151-200 Paid	6	180-185
46[6]	Sample -> $200 Paid	2	186-187
47[6]	Population -> $200 Paid	6	188-193
48[6]	Sample – Amount Paid Missing	2	194-195
49[6]	Population - Amount Paid Missing	6	196-201
50[6]	Sample – Amount Paid	2	202-206
51[6]	Population – Amount Paid	6	207-215
52[6],[7]	Sample – Amount Paid Variance	2	216-223
53[6],[7]	Population – Amount Paid Variance	6	224-231

[6] For the monetary, separation, and nonmonetary-nonseparation denials, this item will equal zero.
[7] Reported with three implied decimal places (xxxxx.xxx).